



COMPUTER SCIENCE

in

ARKANSAS



WINNERS OF STATE CODING COMPETITION

On Saturday April 30th, Governor Asa Hutchinson attended Arkansas's sixth annual Governor's All-State Coding Competition. Governor Hutchinson, in partnership with ARCodeKids, announced the winners of the competition in the Ida Waldran Auditorium of the University of Central Arkansas in Conway.

"Congratulations to the winners and all the students who participated in showing off their coding skills. I am grateful for the enthusiasm of students and educators who have put Arkansas at the forefront of computer science education in the United States." Governor Hutchinson said, "As more of our students elect to take coding and computer science classes every semester, this competition will continue to inspire creativity and ingenuity in young coders."

Arkansas School for the Mathematics, Sciences, and the Arts team members David Clark, Joshua Stallings, and Robert Boerwinkle placed first and each will receive a \$2,000 scholarship; this team was sponsored by Nicholas Seward. Don Tyson School of Innovation in Springdale team members Lucas Kellar, Dylan Crawford, and Eli Wetzel placed second and each will receive a \$1000 scholarship; this team was sponsored by Jessica Mabie. In third place was the Star City High School team, whose members Reid Dutton, Tony Chen, and James West will each receive scholarships of \$500; this team was sponsored by Amy Dreher. The schools that sponsored the first-place, second-place, and third-place teams received \$10,000, \$6,000, and \$4,000, respectively, to support their computer science programs.

ARCodeKids, a 501c3 non-profit established to support the Arkansas Computer Science and Computing Initiative, will provide funds of up to \$50,000 to support the competition. This funding was made possible by a grant from Microsoft Philanthropies, which has committed to providing another \$50,000 for next year's competition. The funding will be used to award an Arkansas Brighter Future 529 Plan college savings scholarship to each member of the top three teams.



2022 COMPUTER SCIENCE EDUCATOR OF THE YEAR NAMED

On Saturday April 30th, Governor Hutchinson also recognized the five state finalists of the 2022 Arkansas Computer Science Educator of the Year award. Each of the following finalists will receive a \$2,500 award from the ADE Office of Computer Science:

- Brenda Qualls, teacher at Bryant High School
- Carl Frank, teacher at Arkansas School for Mathematics, Sciences, and the Arts in Hot Springs
- Kimberly Raup, teacher at Conway High School
- Nicholas Seward, teacher at Arkansas School for Mathematics, Sciences, and the Arts in Hot Springs
- Phillip Blake, teacher at eStem Public Charter Schools in Little Rock



Special recognition goes to Kimberly Raup, photographed above with her family, for being announced as the 2022 Arkansas Computer Science Educator of the Year and will receive an additional \$12,500 award!

Mrs. Raup is an 18 year veteran Computer Science Teacher at Conway High School. During this time she has raised three wonderful children with her husband Ryan Raup and recently welcomed a new son-in-law. In addition to her daily Computer Science courses, Mrs. Raup sponsors the Wampus Cat Coding Club, the Robotics Club, and is the coach for the Conway Esports teams. As part of her never ending efforts to keep up to date with latest trends in her field, Mrs. Raup works for the Office of Computer Science to offer professional development opportunities around the state during the summer, is a part time Adjunct Professor at University of Central Arkansas in the Leadership Studies department, is a rater for the Advanced Placement Computer Science A exam, and continues graduate course work at Arkansas Tech University. Mrs. Raup is a National Board Certified Teacher and holds a BBA in Marketing, BSE in Business/Marketing Education, and a MS in Instructional Technologies.

To see all the photos taken from the event, visit the following link:

CSforAR's Facebook Photo Album for Competition:

<https://www.facebook.com/media/set/?set=oa.718421389283747&type=3>





Address Learning Loss this Summer while Exploring STEM/CS/CTE Careers

Learning Blade can be used to address learning loss by providing summer programs with 400 online mini-lessons in math/science/English/social studies/technology lessons. The lessons reinforce core academic standards for grades 5-9 while exposing students to high-demand/high-wage STEM, Computer Science, and CTE career paths.



Twelve (12) Missions are available and each of them includes:

- 40 interdisciplinary online lessons (10-15 mins each)
- 5 career videos
- Lessons plans for hands-on project-based learning using ready-available materials.
- Tracking system to see student results

Consider also using the NEW resource “Introduction to Coding”.

The screenshot shows the 'Introduction to Coding' mission page. The page has a navigation bar with 'DASHBOARD', 'MY MISSIONS', 'MY LESSONS', and 'RESOURCES'. Below the navigation bar, there's a 'YOUR MISSION' section with a 'MISSION GUIDE' tab. The main content area shows the mission title 'Introduction to Coding' and a task description: 'Learning the basics of computer programming and cybersecurity, and understanding how these skills impact our society.' Below the task description is a video player showing hands typing on a laptop. To the right of the video player is a table with two sections: 'TECHNOLOGIES' and 'CAREERS'. The 'TECHNOLOGIES' section lists 7 topics, with 'Introduction to Cybersecurity' marked as 'In Progress'. The 'CAREERS' section lists 2 topics, with 'Computer Science Careers' marked as 'Completed' and 'Your Choice - Exploring a Career' marked as 'Not Started'. At the bottom of the page, there's a progress bar showing 'Missions Completed: 0 of 1', 'Mission Score: 0 of 14', 'Tools Earned: 0 of 7 needed', and 'Teammates Earned: 1 of 2 needed'. A green progress bar indicates 50% completion.

Sign up for your FREE account to use Learning Blade this Summer: www.learningblade.com/AR.

Book your summer PD or for more info email us at info@learningblade.com.

ARKANSAS COMPUTER SCIENCE NETWORK OF SUCCESS PROGRAM

The Arkansas Department of Education (ADE) Office of Computer Science is pleased to announce registration for the 2022-2023 Arkansas Computer Science Network of Success (ACSNS) program.

Who is this program for?

This program is open to Arkansas Public, Private, and Charter schools. Network of Success teams are developed by bringing together local administration, counselors, teacher cohorts, regional industry, and commerce partners.

The program is designed to support CS certified educators already holding a 528, 5016, and/or 5014 licensures.

The ACSNS program is directly aligned with the Arkansas Computer Science Gold Medal School Program (ACSGM), therefore schools wishing to complete that application process would be a good candidate for this program.

What does this program do for my school?

The ACSNS provides educators with the tools and strategies needed to create a greater student demand, school capacity, and economic value in computer science and computing programs within their districts.

Concepts and strategies covered throughout this program include:

- Implementing and growing a successful CS Program
- Creating a feeder system by focusing on vertical alignment among campuses
- Effects of AP CS and how it affects your school's SQSS ESSA ranking
- Identifying, engaging, and building relationships with regional industry and commerce partners
- Promoting your program through a properly developed communications plan
- Identifying and diminishing barriers to broadening participation/diversifying enrollment
- Incorporate competitions and out of school activities into a successful program
- Understanding the Arkansas Computer Science Gold Medal School Program



When and where does this “magic” happen?

The ACSNS is a one-year program that includes the following:

- The initial training will be provided virtually, June 2-3, 2022.
- There will be a fall 3-hour training and spring 3-hour training with dates to be determined.
- To finish up the year, we will end June 2023 with a celebration event.

Article continues on next page.

ARKANSAS COMPUTER SCIENCE NETWORK OF SUCCESS PROGRAM CONT.

Why is this program important?

This program brings education full circle where we are able to build the connections from K-12 education to student-focused careers. This is accomplished by facilitating meaningful communication and synergy within the local school district, secondary education, and industry.

Ok, so now I'm interested, how do I register?

The registration link can be found in escWorks and [HERE](#). Each person who plans to attend the training (e.g. CS teacher, counselor, administrator, etc.) should register.

Registration Link: https://www.escweb.net/ar_esc/catalog/session.aspx?session_id=471986

Still not sure this is for you?

Feel free to reach out to Tammy Glass at tammy.glass@ade.arkansas.gov, John Hart at john.hart@ade.arkansas.gov, or Leslie Savell at leslie.savell@ade.arkansas.gov. We will be glad to set up a zoom or phone call if needed.

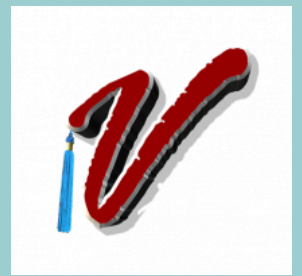
COMPUTER SCIENCE AND VIRTUAL ARKANSAS

The ADE Office of Computer Science announced that ADE is continuing, with modifications, its partnership with the Arch Ford Education Service Cooperative's Virtual Arkansas (VA) division.

Since 2016, the ADE Office of CS has provided funding to Arch Ford to cover all Arkansas public school students' CS enrollments and use of VA's content only resources in CS.

Beginning in the 2022-2023 school year, the ADE Office of CS will continue providing funding to Arch Ford for the following:

- Content Only Curriculum Resources - All Year 1, Year 2, and Year 3 CS courses, including Advanced Placement CS A, available through the VA system
- CS Enrollments Using a VA Instructor - All Year 2 and Year 3 CS courses available through the VA system



Beginning with the 2022-2023 school year, the ADE Office of CS will no longer be providing funding for CS enrollments using a VA instructor for any Year 1 CS courses, which includes Advanced Placement CS Principles and the other Year 1 CS courses found at <https://csforar.info/courses>.

School leaders should note that VA will continue to provide CS Year 1 content with a VA instructor for their normal rate of \$100.00 per ½ unit for students enrolled prior to June 3rd, 2022. After that date, the enrollment price per ½ unit of CS Year 1 content will increase to \$250.00. Schools utilizing a VA instructor for CS Year 1 courses will be responsible for all enrollment fees and expenses.

Additional information on the VA system and the CS courses available through the VA system can be found at www.virtualarkansas.org.

If your school needs assistance in getting a teacher certified in computer science, our office has developed numerous pathways and trainings to assist with that process. Please reach out to CSforAR@ade.arkansas.gov or any of our team members, found at <https://csforar.info/specialists>, if you have questions or need assistance.

COMPUTER SCIENCE SUMMER PROFESSIONAL DEVELOPMENT

The CSforAR Team is happy to announce our Summer 2022 Professional Development training sessions. While all current offerings can be found by visiting the ADE Computer Science [Professional Development Schedule](#), here are summaries of each of the sessions:

[K-4 Introduction to Computer Science](#) (2-day training) Are you new to computer science and/or looking for embedded activities? Join us for this entry level training that focuses on the integration of computer science into the K-4 classroom. Actively participate in the exploration of coding tools, unplugged activities, and online coding resources to make connections between STEM, Literacy, and Computer Science. Join other teachers, leaders, and curriculum coordinators to engage in meaningful learning activities. Leave with resources including lesson ideas, projects, and a better understanding of how you can be an influential part of the Computer Science Initiative. Note: To further develop your CS concept knowledge join the Deep Dive Into the K-4 Computer Science Concepts Professional Development. This professional development will be offered twice: June 13-14 & July 7-8. Registrants are welcome to attend both the Intro and Deeper Dive back-to-back.

[K-4 Deeper Dive Into Computer Science](#) (2-day training) Are you ready to further develop your coding skills? This training puts participants on the path to better understanding the K-4 Computer Science Coding Concepts. Come join us and actively participate in gaining a deeper understanding of various computer science concepts through the use of introductory-level, block-based coding. The participant will gain a more concrete understanding of computer science in general and strengthen the participant's ability to integrate those computer science concepts into the classroom. Note: Participants are expected to have entry-level CS knowledge such as that presented in the K-4 Introduction to Computer Science. This professional development will be offered twice: June 15-16 & July 11-12. Registrants are welcome to attend both the Intro and Deeper Dive back-to-back.

[Coding Block Resources](#) (2-day training) Do you need resources and projects to teach the standards? This PD will help coding block teachers go above and beyond the code. We will help you find activities, resources, and projects that will make the coding block exciting and fun. Resources used throughout this training will focus on different aspects of computer science. Note: If you need the basics of coding, we strongly encourage you to also consider joining us for the Coding Block: Learn to Code Professional Development. This professional development will be offered twice: June 22-23 & July 27-28. Registrants are welcome to attend both the initial and resource course back-to-back.

[K-8 Lead Teacher Training and Bonus Program](#) (5-day training) Share your excitement and enthusiasm for computer science by being a lead teacher within your district. This five day (30 hours) professional development is mandatory for educators interested in the Arkansas Department of Education K-8 Lead Teacher Training and Bonus program. Note - All five days of the training and other requirements must be completed to be eligible for a bonus; it will not be prorated. Each Arkansas educator may only receive this bonus once. Interested in adding the 528 Computer Science Certification to your license? Consider joining the High School Computer Science and Certification Preparation Professional Development. This professional development will be offered once: July 18-22.



COMPUTER SCIENCE SUMMER PROFESSIONAL DEVELOPMENT CONT.

Coding Block: Learn to Code (2-day training) Do you need to learn the concepts behind the coding block and explore a professional, beginner-friendly, text-based programming language that can be used in the coding block? This training puts you on the path to better understand the coding block standards and become more proficient in a text-based programming language. Content and activities are geared towards increasing your knowledge of programming to aid in teaching the coding block. Note: If you need additional support we recommend attending the 5-8 Deeper Dive Into Coding PD. For additional Coding Block activities, projects and resources consider joining us for the Coding Block Resources PD. This professional development will be offered twice: June 20-21 & July 25-26. Registrants are welcome to attend both this initial and the resources back-to-back.

5-8 Introduction to Computer Science (2-day training) This entry-level training focuses on the integration of computer science into the 5-8 classroom. Explore coding tools, unplugged activities, and online coding resources to make connections between STEM, Literacy, Music, and Computer Science. Join other teachers, leaders, and curriculum coordinators to engage in meaningful learning activities. Leave with resources including lesson ideas, projects, and a better connection with other CS teachers throughout the state. Are you a superstar? Need even more? Join us for a code-heavy round 2 with our 5-8 Deeper Dive. We also encourage you to consider joining the Coding Block: Learn to Code PD, where we will focus solely on text-based coding. This professional development will be offered twice: June 13-14 & July 18-19.

5-8 5-8 Deeper Dive to Computer Science (2-day training) This training will provide activities and resources that will focus on both block-based and text-based coding, while also providing cybersecurity training to meet the new CS Standards. Participants will utilize code to create various music, art, math, science, PE, and geography projects. We will explore coding for Micro:bits (using an online simulator), Turtlitch, and Scratch to create advanced projects. Though not mandatory, we recommend participants have taken the 5-8 Introduction before the session starts. Are you looking for more text-based coding? Consider joining the Coding Block: Learn to Code PD as well. This professional development will be offered twice: June 15-16 & July 20-21.



High School Computer Science and Certification Preparation Don't know where to begin or need help getting 528 certified? The purpose of this training is to help narrow down and focus your studies on important concepts while also giving you a basic understanding of various computer science principles. This session is to prepare Arkansas educators planning to teach high school computer science and needing assistance passing the Computer Science (CS) Praxis Exam 5652. Participants will review Arkansas 9-12 Computer Science course codes, computer science standards, resources, and prep material to be used for passing the Computer Science Praxis. Participants will need to spend time outside of the training prior to taking the Praxis Exam. Note: If you are interested in a deeper understanding of programming, networking, or cybersecurity we strongly encourage you to consider joining us for one or more of the intermediate and/or advanced PDs. This professional development will be offered: June 13-17, June 20-24, June 27-30, June 27-July 1, July 6-9, and July 25-29.

COMPUTER SCIENCE SUMMER PROFESSIONAL DEVELOPMENT CONT.

[AP Computer Science A - High School CS Professional Development](#) This 5-day workshop is for those who hold the 528 Computer Science Teacher Certification, 5016 Computer Science Approval Code, or 5014 Computer Science Approval Code and have a fundamental understanding of computer programming. NOTE: This training will take place on the Arkansas Tech University campus in Russellville. Individuals selected for the Academy will be given priority any remaining seats will be given to individuals registered through escWorks. The escWorks registration will serve as a waiting list. This training includes an overview of the AP Computer Science A Course and Exam Description along with lab activities that can be used to teach key concepts. The workshop covers the AP CS A units of Data Types, Objects, Logical Operators, Iteration, Arrays, Inheritance and Recursion. This professional development will be offered: July 18-22.

There are several more Intermediate and Advanced trainings that you do not want to miss out on! From Robotics to Python, we have you covered! Please be sure to check out all of our offerings at bit.ly/CSforARPD, and also [HERE](#) for a shareable video with QR codes to all of our PDs. As always, if you have any questions email our CSforAR Team at csforar@ade.arkansas.gov.

COMPUTER SCIENCE SUMMER CAMPS

Each summer, several Arkansas universities offer STEM summer camp programs for students. Please share these resources with any and all interested students who are excited about computer science! The following are links to pages that discuss various summer programs:

- University of Arkansas at Little Rock: [Windstream Girls CODE](#)
- Arkansas State University: [Engineering & Computer Science Summer Camps](#)
- Southern Arkansas University: [Game Development Summer Camp](#)
- University of Arkansas at Fayetteville: [College of Engineering Summer Camps](#)
- Arkansas Innovation Hub: [STEAM Summer Camps](#)



Do you know of any STEM summer camps that you would like to share? Be sure to sign up for our Computer Science listserv at <http://bit.ly/CSforARListserv>, and share what you find with us!



UPCOMING TRAINING

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